April-18-13 10	:26:16 AM			1()(	1178*	247.7						Page 1
Item ID: Revision ID: Item Name:	646.3718 Custom Washo	er		Accept	*N900	)040	100	ገ*	Setup	Start Stop	ı VI	S1*
Start Date: Required Date: Reference:	4/18/13 : 5/02/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item Customer:					зтор	*N:	S2*
Approvals:		n: <u>M</u> U5	Date: 13-04-18	Tooling: SPC (Y/N):		ate:		J		Start Stop	•	R1* R2*
Sequence ID/ Work Center II	D	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	•		leject	Insp.
Draw Nbr	Revi	sion Nbr						Qty	Qty		lumber	Stamp
646.3700	A		•									
110				0.00								<del></del>
*110* Waterjet		Memo		0.00				20		<b>_</b>		JMB-4-20
FLOW CNC Waterjo	et	1-Cut as per l Dwg Rev: Prog Rev:	Dwg A A									
		2-Deburr if n	ecessary									
120	•	QC2- Inspect parts off ma	chine FAI/FAIB	0.00						-		
*120* QC Quality Control		Memo		0.00				_ 2	٥			Jm 13-4-29

		1	DQA.
NCR:	Yes / No	WORK ORDER NON-CONFORMANCE / UPDATE	

											QA Closed:	Date	5:	
Work Ordei	·					DISPOSITION				AGAINST DE	EPARTMENT,	/PROCESS		
Part No						Rework Scrap Use-as-is	The	٨	Skid-tube  Machining  oforming	Crosstube Small Fab Finishing		Water Jet d. Eng. Coor. re/Packaging	Engineering Quality Other	
NCR No	0				-	Work Order Update			Large Fab	Composite				
Root				D	scri	ption of work order update	Initia	1	Act	tion	Sign &			
Cause	Date	Step	Qty		(	or Non-conformance	Chief E	ng	Descr	ription	Date	Verification	QC Inspector	
Ooc/Data Equip/Tooling Operator Material Setup Other Process Supplier Training														
Unapproved			<u> </u>	1		F	AULT CA	TFG	ORY		<u> </u>			
Landin	g Gear	<del></del>				General								
Bending Centre Not Concentric to O/S Cracks Crushed/Crimped. Cuffs Heat Treat				Bend BOM/Route Broken/Damaged Burrs Contamination Countersink	Hard Inspe	Grain Hardware Inspection Incomplete Instructions Incomplete/Unclear Maintenance Mislabeled		Over/Under tolerance Temper Part Incorrect Weld		Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled				
F	Inspection Strip in Tube				Cut Too Short	Misr	read			Power Loss/	'Surge [	Other		
	Ripples ir	Bend				Drill Holes	Offse	et						
	Torque W	/aves in E	Extrusio	n'		Drawing	$\vdash$		alibration					
	Turning Sequence				Finish	<b>—</b>	Out of Sequence							
1	Wave/Twist in Tube			ı	1	Folio	Outside Din			Outside Dimensions .				

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#### Work Order ID 100128

- April-18-13 10:26:16 AM

\*100128\*

Item ID:	646.3
Revision 1D:	

3718

Accept

\*N900040100\*

Setup Start \*NS

Stop \*NS2\*

Item Name:

Custom Washer

**Start Date:** 4/18/13

Required Date: 5/02/13

**Start Qty: 20.00 Req'd Qty: 20.00** 

\*20\*

Cust Item ID:

**Customer:** 

Reference:

								_			
Approvals:	Process Plan:	Date:	Tooling:	Date:			Run Start 🛧			'NR1*	
	QC:	Date:	SPC (Y/N):	D:	ate:			Sto	<sup>р</sup> *М	R2*	
Sequence ID/ Work Center II	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Otv	Reject	Reject Number	Insp.	
130	QC8- Inspect parts -	second check	0.00			Code	Qty	Qty	Number	Stamp	
*13 <b>0</b> *			Ship				$\alpha$		•		

140

Quality Control

Outsource process-Anodize per QSI017 4.1.10.1

Memo

0.00

\*140\* Outsource4

Memo

0.00

Outsource process - Anodize

Issue P/O: \9887

HARD ANODIZE, COLOR BLACK AS PER DWG.(SEE NOTE 2)

150

Receive & Inspect for Damage & Mat'l Certs

0.00

\*150\*

Packaging

Memo

0.00

/13/0/24 (2v)

Packaging

NCR: Ye	es / N	o					WORK ORDER NON-	COI	NFORM	MANCE / UPDA	ATE	DQA: QA Closed:		-3
				·			DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	
Nork Order:Part NoNCR No					Rework Skid-tube Crosstube Machining Small Fab Thermoforming Finishing Work Order Update Large Fab Composite				Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other				
Root					De	scri	otion of work order update		nitial	Action	1	Sign &		
Cause	Dat	e Ste	ep	Qty		(	or Non-conformance	Ch	ief Eng	Descript	tion	Date	Verification	QC Inspector
quip/Tooling perator Material etup Other rocess upplier raining														
								AUL	T CATE	GORY		772		
Landin	Bendi Centro Cracks Crush Cuffs Heat 1 Inspect Ripple Torqu Turnir	e Not Co s ed/Crimp reat ction Stri es in Bend e Waves ng Seque	ped. ip in T d s in Extence	iube trusion			General Bend BOM/Route Broken/Damaged Burrs Contamination Countersink Cut Too Short Drill Holes Drawing Finish		Instruct Mainte Mislabe Misread Offset Out of 9	ion Incomplete ions Incomplete/Undenance eled d Calibration Sequence	clear	Ovalized Over/Under Part Incorre Part Lost/M Part Moved Positioned V Power Loss/	ct issing Wrong	Pressure/Forced Temperature/Cure Weld Wrong Stock Pulled Other
-	Torqu Turnir	e Waves	in Extence				Drawing		Out of 9					

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# 

\*100128\*

-11/111 10 13 10.	. 20. 10 AW			-							
Item ID: Revision ID:	646.3718			Accept	*N900	040	100	<b>)*</b> s	Setup Sta	art <b>*</b>	IS1*
Item Name:	Custom Washer								St	op *\	IS2*
Start Date: Required Date: Reference:		Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item Customer:	ID:				IX.	,
Approvals:	Process Plan		Date:	Tooling:	D	ate:	-	R	Run Sta	rt *N	R1*
			Date:			ate:			Ste	<sup>op</sup> * <b>N</b> ∣	D2*
Sequence ID/ Work Center II 160 *160* QC Quality Control	D 1	Operation Description QC5- Inspect part complet Memo	eness to step on W/O	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
170 *170* SprayPaint Spray Painting		<b>Memo</b> PRIME IAW I	MIL-P-23377J TYPE1 CL	0.00 0.00 ASS N AS PER DWG.	(SEE NOTE 2)			_CX	13/05	5/14 3	LO_
			860-50 PRIMER BATCH		A.T.	¢.					
<sup>180</sup> *18∩*	*	C14- Inspect Spray Paint		0.00	dr.	_		70			
QC Quality Control		Memo Memo		0.00	BSZY			<u> </u>			

NCR:	Yes	1	No

## WORK ORDER NON-CONFORMANCE / UPDATE

DISPOSITION

	DQA:	Date:		
ATE	QA Closed:	Date:	\ \	
AGAINST	DEPARTMENT/PR	OCESS		
Crosstube Small Fab Finishing		Water Jet ing. Coor.	Engineering Quality Other	

	Part No.  NCR No.			Rework Scrap Use-as-is Work Order Update			Skid-tube Crosstube  Machining Small Fab  Thermoforming Finishing  Large Fab Composite		<b>⊣</b>	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other		
Root			<u> </u>		De	scription of work	order update	Initial	A	ction	Sign &		
Cause		Date	Step	Qty	ľ	or Non-confor	,	Chief Eng	Des	cription	Date	Verification	QC Inspector
Doc/Data													
Equip/Tooling					1								
Operator													
Material													
Setup													
Other											ĺ		
Process													
Supplier													
Training									-				
Unapproved				<u> </u>									<u> </u>
								AULT CATE	GORY				
Landir	$\neg$	1			• •	Gen	eral			Г	Ovalized	Г	Pressure/Forced
	Щ	Bending				Bend		Grain		}-	Over/Under	toloranco	Temperature/Cure
	Ш	Centre No	ot Concer	ntric to	0/5	BOM/Route	t	Hardw		-	Part Incorre	ļ	Weld
	$\vdash$	Cracks				Broken/Dam	aged		tion Incomplete	/! to along	Part Income Part Lost/M	<u></u> ⊢	Wrong Stock Pulled
	-	1	Crimped. Burrs		<b></b>	tions Incomplete enance	Junciear	Part Moved	issuig [				
		Cuffs			- 1	Contamination		$\vdash$		-	Positioned \	Mrong	
		Heat Trea			Countersink		Mislab		}-	Power Loss		Other	
		1	on Strip in Tube Cut Too Short			- Misrea Offset		L	Trower ross/	ourge [	Totalei		
		Ripples in				Drill Holes							
		Torque Waves in Extrusion Drawing			Out of Calibration Out of Sequence								
	Turning Sequence Finish Wave/Twist in Tube Folio			Outside Dimensions									
		wave/Tw		oe • A (NCD) A (		Folio		Lioutsia	e Dimensions				

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- April-18-13 10	April-18-13 10:26:16 AM			*100128*							
Item ID: Revision ID:	646.3718			Accept	*N90004010	00* Setup Start *NS1*					
Item Name:	Custom Was	her				Stop *NCO*					
Start Date: Required Date Reference:	4/18/13 e: 5/02/13	Start Qty: 20.00 Req'd Qty: 20.00	*20* *20*		Cust Item ID: Customer:	IV.5/					
Approvals:	Process Pl	an:	Date:	Tooling:	Date:	Run Start *NR1*					
	QC:		Date:	SPC (Y/N):	Date:	Stop *NR2*					
Sequence ID/ Work Center I 190 *100* Packaging	D	Memo ***IDENTIF	ck Location: <u>STS</u> 36	0.00	Tool ID Tool # Pla Coo HE P# AND	r					
200 *200* QC Quality Control		REV***  QC21- Final Inspection - 1  Memo	Work Order Release	0.00		13/5/30 A)					

NCR:	Yes	1	No
NCK.	162	/	110

## WORK ORDER NON-CONFORMANCE / UPDATE

504	5 4	
DQA:	Date:	
_		

					1					QA Closed:	Date		
Work Order:						DISPOSITION	AGAINST DEPARTMENT/PROCESS						
Part No.					Scrap Machining Small Fa Use-as-is Thermoforming Finishin		Crosstube Small Fab Finishing	4	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other			
NCR No	)				-	Work Order Update		Large Fab	Composite	j	3upplier[		
Root				D		ption of work order update	Initial		ction	Sign & Date	Verification	QC Inspector	
Cause	Date	Step	Qty	<u> </u>		or Non-conformance	Chief Eng	Desc	cription	Date	verification	QC mspector	
Doc/Data  Equip/Tooling  Operator  Material	-												
-	-	·	ļ										
Setup	-						İ						
Other Process	-						ĺ						
Supplier	-										·		
Training	1								•				
Unapproved		]		1									
			<del></del>	İ		F	AULT CATE	GORY					
Landing	Gear	<del></del>	•	Ì		General				_		<del>-</del>	
Γ	Bending			ı		Bend	Grain			Ovalized	L	Pressure/Forced	
	Centre No	ot Conce	ntric to	o/s		BOM/Route	Hardw	Hardware		Over/Under	tolerance	Temperature/Cure	
	Cracks					Broken/Damaged	Inspec	tion Incomplete		Part Incorre	ct _	Weld	
	Crushed/Crimped.			Burrs	Instruc	Instructions Incomplete/Unclear		Part Lost/Missing		Wrong Stock Pulled			
	Cuffs				Contamination	Maint	Maintenance		Part Moved				
	Heat Trea	ıt				Countersink	Mislab	eled	L	Positioned V	Vrong	_	
Γ	Inspection	n Strip in	Tube			Cut Too Short	Misrea	d		Power Loss/	Surge	Other	
	Ripples in	Bend				Drill Holes	Offset						
	Torque W	aves in E	Extrusio	n		Drawing	Out of	Calibration					
	Turning S	equence		1	Г	Finish	Out of	Sequence					
Wave/Twist in Tube Folio				Folio	Outsid	e Dimensions							

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### Picklist Print

April-18-13 10:48:20 AM

Work Order ID: 100128

646.3718

Parent Item Name: Custom Washer

\*100128\*

\*646 3718\*

**Start Date: 4/18/13** 

Required Date: 5/02/13

**Start Qty: 20.00** 

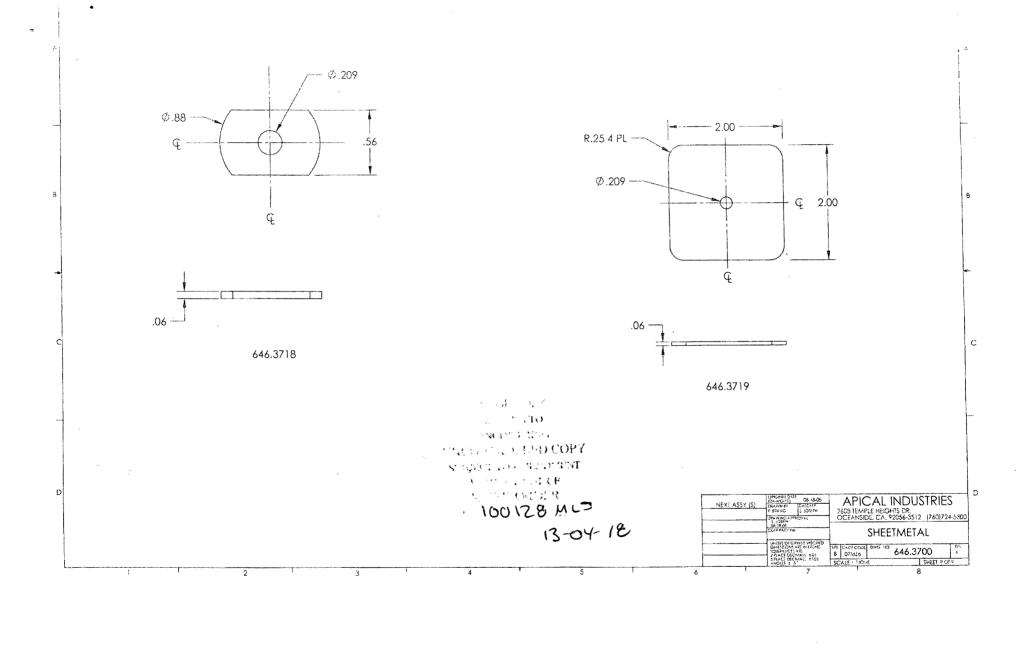
Required Qty: 20.00

Comments:

Parent Item:

IPP REV:A 12.10.22 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.063		Purchased	No			110	sf	220.8625	0.0034				
*M6061T6 6061-T6 .063 Sheet	SS 063*		-		÷.				**	0.1			Jm13-4-29
				Location		Loc C	<u>Oty</u>	Loc Code					
				MAT021		220.8	625		_				
					123135	120.5	625						
					124003	1	00.3			·			
				į	125431				١	<del>3</del> 5431			



DART AEROSPACE LTD	Work Order:	100128
Description: Doorse Custom Washer	Part Number:	646.3719
Inspection Dwg: 646 · 370 Rev: A		Page 1 of 1

#### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments		
00.209"	10.005-0-001	0.210"	_		٧	JLmc1		
0.88	11-0:00	0.875°			V			
0.56"	tho.010	0.561"			V			
0063"	t1-0.070	0.061	-		ν			
- · · ·	,							
	,							
	·				<del></del>			
	·							
:					:			

Measured by:	Im	Audited by:	SmP	Preliminary Approval:	
Date:	13-4-28	Date:	13429	Date	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

\$ 10.00k.15

7.7. 7.7.



A.T.G. Industries Inc. 731, rue Industrielle Rd. PLATING DEPARTMENT Rockland, On K4K 1T2 Canada

Ph: (613) 446-4544 Fax: (613) 446-4556

#### Pack List

Number: 62398

Date: 24-May-13

То

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7 Canada Ship To

DART AEROSPACE LTD 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Chin Via	
	· · · · · · · · · · · · · · · · · · ·	Ship Via	
Quantity	Description		
1	Part: ASST	Rev:	
lot			
	20 PCS 646.3812		
	10. <del>PCS 646.3717</del> 20 PCS 646.3718		
′~	20 PCS 646.3719		
	10 PCS 646.3713		
	12 PCS 646.3714		
	25 PCS 646.3813 32 PCS 646.3810		
	132 FC3 646.3810		
	HARD ANODIZE BLACK		
	MIL-A-8625 TYPE III CLASS 2		
,	PRIME MIL-P-23377J TYPE I CLASS	5 N	
	6 PCS D4703-042		
	16 PCS D4703-042		
`	BLACK ANODIZE		
	MIL-A-8625 TYPE II CLASS 2		
	Job: 20130308	PO: 19887 Line:	
	Certificate of Confo		
	A.T.G. Industries certifies that all items in with all requirements, specifications and of	this shipment are in conformance drawings referenced in the purchase order.	
	ISO 9001 : 2008 REGI ATG SALES-2010 TER	STERED IMS Apply	•
	211/-/2	MONTE L	
	DATE: 19/3/13		
	w		
	CERTIFIED SIGNATURE :		
	3		
	RECEIVER SIGNATURE :		
	•		ļ